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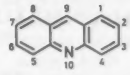

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- Ring Synthesis 837

● Azasnoutenes
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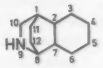
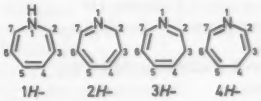
● 9-Azatricyclo[6.2.2.0^{2,7}]dodecane



- 10-Oxo-9-azatricyclo[6.2.2.0^{2,7}]dodeca-3,5,11-trienes
- Ring Synthesis 1013

● Azepine



1*H*- 2*H*- 3*H*- 4*H*-

- 2-Amino-3-oxo-3*H*-azepines
- Properties 612

● Azete

- 3-Imino-2,3-dihydroazetes
- Ring Synthesis 1090
- 3-Amino-4-trifluoromethyl-2-oxo-azetidines
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- 2,3-Diiminoazetidines
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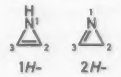

1*H*- 2*H*-

- 2*H*-Azirine-3-carboxylic Esters
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● Azulene

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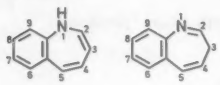
- Ring Synthesis 385
- 1-Oxodecahydroazulenes
- Ring Synthesis 385

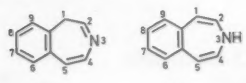
● 1-Benzazepine



1*H*- 3*H*-

- 1-Benzazepines
- Ring Synthesis 1018
- 2-Amino-3-oxo-3*H*-1-benzazepines
- Synthesis 612
- 3-Bromo-2-oxo-2,3-dihydro-1*H*-1-benzazepines
- Synthesis 612
- 2,3-Dioxo-2,3-dihydro-1*H*-1-benzazepines
- Synthesis 612
- 5-Hydroxy-2-oxo-2,5-dihydro-1*H*-1-benzazepines
- Synthesis 612

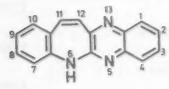
● 3-Benzazepine



1*H*- 3*H*-

- 2-Amino-5-bromo-1-oxo-1*H*-3-benzazepines
- Synthesis 612

● [1]Benzazepino[2,3-*b*]quinoxaline



6*H*-

- Synthesis 612

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- Alkylbenzenes
- Synthesis 759, 979
- 2-Bromo-*m*-xylene
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- 2-Chloro-*m*-xylene
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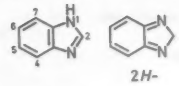
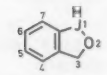
● Benzimidazole



2*H*-

- Benzimidazoles
- Ring Synthesis 8, 551
- 2-Oxo-2,3,4,5,6,7-hexahydrobenzimidazoles
- Ring Synthesis 307

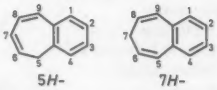
● 1,2-Benziodoxole



- 1,1,1-Triacetoxy-3-oxo-J^{V}-1,2-benziodoxole
- Synthesis 227 (7025)

● Benzocyclododecene, 1-Oxo-1-14-tetradecahydro-
- Ring Synthesis 802

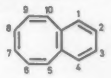
● Benzocycloheptene



5*H*- 7*H*-

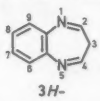
- 1,6-Dioxo-1,2,3,4,7,8,9,9a-octahydrobenzocycloheptenes
- Ring Synthesis 985
- 1-Oxo-1,2,3,4,6,7,8,9-octahydro-5*H*-benzocycloheptenes
- Ring Synthesis 802

● Benzocyclooctene



- 1-Oxo-1,2,3,4,5,6,7,8,9,10-decahydrobenzocyclooctenes
- Ring Synthesis 802

● 1,5-Benzodiazepine



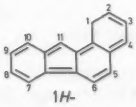
3*H*-

- 2-(2-Hydroxyphenyl)-4-phenyl-3*H*-1,5-benzodiazepines
- Ring Synthesis 340

● 1,3-Benzodioxole

- 2-Alkoxy-1,3-benzodioxoles
- Synthesis 31

● Benzo[*a*]fluorene



1*H*-

- 11-Oxo-6a,11a-dihydro-11*H*-
- Ring Synthesis 136

● 1-Benzofuran

- 1-Benzofurans
- Synthesis 492
- 2-Nitro-1-benzofurans
- Ring Synthesis 1074
- 3-Hydroxy-2-nitro-2,3-dihydro-1-benzofurans
- Ring Synthesis and Dehydration 1074
- 3-Methylene-2,3-dihydro-1-benzofuran, stabilized as a Cr Complex
- Synthesis 492

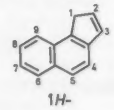
● 2-Benzofuran

- 3-Alkylidenephthalides
- Synthesis 38
- Phthalides (1-Oxo-1,3-dihydro-2-benzofurans)
- Ring Synthesis 137, 261

● Benzofurazan

- Benzofuroxans
- Ring Transformation 938

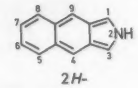
● Benzo[*e*]indene



1*H*-

- 1-Alkylthio-2-oxo-3,3a,4,5-tetrahydro-2*H*-
- Ring Synthesis 643

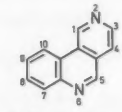
● Benzo[*f*]isoindole



2*H*-

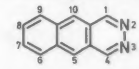
- Ring Synthesis 133

● Benzo[*c*]-2,6-naphthyridine



- Benzo[*c*]-2,6-naphthyridines
- Synthesis 541
- 5-Chloro-1-oxo-1,2-dihydro-
- Ring Synthesis 541

● Benzo[*g*]phthalazine

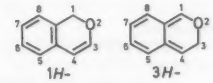


- 1,4-Dioxo-1,2,3,4-tetrahydro-
- Ring Synthesis 197

● 1-Benzopyran

see: Chromene

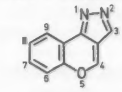
● 2-Benzopyran



1*H*- 3*H*-

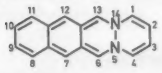
- 1-Oxoisochromans
- Ring Synthesis 264
- 4-Oxo-3,4,4a,5,8,8a-hexahydro-1*H*-2-benzopyrans
- Ring Synthesis 1000

● [1]Benzopyrano[4,3-*c*]pyrazole



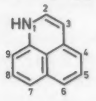
- 3-Oxo-2,3-dihydro-
- Ring Synthesis 548

● Benzo[*g*]pyridazino[1,2-*b*]phthalazine



- 6,13-Dioxo-1,4,6,13-tetrahydro-
- Ring Synthesis 197

● Benzo[*de*]quinoline



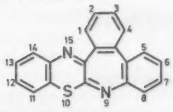
1*H*-

- Ring Synthesis 240

● 1,4-Benzoselenazine

- Ring Synthesis 573

● [1,4]Benzothiazino[2,3-*b*]dibenzo-[*d*,*f*]azepine

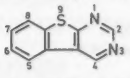


- Ring Synthesis 612

● 1,3-Benzothiazole

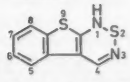
- 1,3-Benzothiazoles
- Ring Synthesis 8
- Reaction with 2-Alkenylmagnesium Halides 522
- Pentachloro-1,3-benzothiazoles
- Ring Synthesis 589
- 2,3-Dihydro-1,3-benzothiazoles
- Ring Synthesis and Cleavage 288
- 2-(2-Alkenyl)-2-alkyl-2,3-dihydro-1,3-benzothiazoles
- Synthesis 522

● [1]Benzothieno[2,3-*d*]pyrimidine



- 2,4-Dioxo-1,2,3,4,5,6,7,8-octahydro-
- Ring Synthesis 190

● [1]Benzothieno[2,3-*d*]-2,1,3-thiadiazine

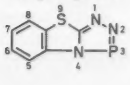


- 4-Oxo- and 2,4-Dioxo-3,4,5,6,7,8-hexahydro-1*H*-, 2-Oxide and 2,2-Dioxide
- Ring Synthesis 190

● 1-Benzothiophene

- Ring Synthesis 434

● [1,3]Benzotriazolo[3,2-*d*][1,2,4,3]triazaphosphole



- 3-Amino-2,3-dihydro-
- Ring Synthesis 1067

● 2,3-Benzoxathiin

- 1,4-Dihydro-2,3-benzoxathiin 3-Oxide
- Ring Synthesis 132

● 1,3-Benzoxazine

2*H*- 4*H*-

- 4-Methylene-4*H*-1,3-benzoxazines, substituted at the Methylene Group
- Ring Synthesis 535
- 2,4-Dioxo-2,3-dihydro-4*H*-1,3-benzoxazines
- Ring Synthesis 276

● 1,3-Benzoxazole

- Ring Synthesis 8

● Betaines (Synthesis)

- 5-Aminiomethyl-1,2-oxazole-3-oxides 1100
- Dehydroaminophosphoniocyclobutene-dione Betaines 1055
- Dehydroaminopyridiniocyclobutene-dione Betaines 1055
- Reaction with 2-Aminobenzoic Esters 220

● Bicyclobutane

- Bicyclobutane-2,2-dicarboxylic Esters
- Ring Synthesis 871

● Bicyclo[3.2.0]heptane

- 7-Imino-6-oxo-
- Ring Synthesis 1093

● Bicyclo[2.2.1]heptane (Norbornane)

- Bicyclo[2.2.1]heptenes
- Oxidation 1142
- 7-Diphenylmethylenebicyclo[2.2.1]heptenes
- Ring Synthesis 798
- Bicyclo[2.2.1]heptene-5-carboxylic Esters
- Synthesis 262

● Bicyclo[6.1.0]nonane

- 9,9-Dibromo-3-oxo- and 9,9-Dibromo-4-oxo-
- Ring Synthesis 176

● Bicyclo[4.2.1]nonane

- 7,7,8,8-Tetracyanobicyclo[4.2.1]nona-2,4-diene
- Ring Synthesis 949

● Bicyclo[3.2.2]nonane

- 8,8,9,9-Tetracyanobicyclo[3.2.2]nona-2,6-dienes
- Ring Synthesis 949

● 1,1'-Binaphthyls, Optically Active

- Synthesis 317

● Boranes

- 9-Alkyl-9-borabicyclo[3.3.1]nonanes
- Synthesis 257
- 1-Alkynyldifluoroboranes
- Reaction with Aldimines 444 (7070)
- Trialkylboranes
- Carbonylation 256

● *exo*-Brevicomin (Synthesis) 1060

● *C*-Bromo-*C*-Chloro Compounds

- 2-Alkoxy-1,1-dibromo-2-chloroethylenes
- Synthesis and Reactions 557

● *C*-Bromo Compounds

- 4-Alkoxy-1-bromo-1-alkenes
- Synthesis 996 (7179)
- Bromoalkanes
- Synthesis 347 (7038)
- Conversion into Alkanamines 202
- Bromoarenes
- Synthesis 647
- Bromobenzonitriles
- Synthesis 778
- Bromocyclopropanes
- Synthesis 441 (7060)
- Bromoform
- Synthesis 674
- Bromomethylarenes
- Synthesis 317
- Bromonitromethane
- Cyclization Reactions 1074
- 4-Bromo-5-oxo-4,5-dihydropyrazoles
- Synthesis 299
- Dibromomethylarenes
- Synthesis 317
- 4,4-Dibromo-5-oxo-4,5-dihydropyrazoles
- Synthesis and Hydrodebromination 299

● Cadmium, Organic Derivatives

- derived from Diazo Compounds
- Synthesis 570

● Cantharidine (Synthesis) 1008

● Carbacyclins

- Oxidative Degradation of an Iloprost *Z*-isomer 925

● Carbamic Acid Azides

- Synthesis 914

● Carbamic Acid Esters

- Alkyl *N*-(2-Alkenyl)-carbamates
- Synthesis 992 (7168)
- Alkyl Carbamates
- Synthesis 282
- 3,3'-(Hydrazin-1,2-diyl)-bis[2-alkenylidenecarbamic Esters]
- Synthesis and Cyclization Reactions 1146
- 2-Trimethylsilylethyl Carbamates
- Synthesis 838

● Carbamic Acid *O*-Succinimidyl Derivatives (Succinimidyl Carbamates)

- Synthesis and Reactions 231 (7034)

● Carbamimidic Chlorides, *N*-Acyl-

- Cyclization Reactions 311

● Carbamodithioic Acid Esters

see: Dithiocarbamic Acid Esters

● Carbamothioic Acid Esters

see: Thiocarbamic Acid Esters

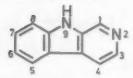
● Carbimidic Dichlorides

- *N*-Polychloroalkylcarbimidic Dichlorides
- Synthesis and Cyclization Reactions 586

● Carbimidodithioic Esters

- Cyclization Reactions 868
- *N*-Cyanocarbimidodithioic Esters
- Cyclization Reactions 311

● Carbodiimides
- Reaction with Nitromethane 509
- Reaction with Oxiranes 1144
● β-Carboline (3-Carboline, Pyrido[3,4-*b*]indole)



- 3,4-Dihydro-
- Ring Synthesis 1134
- Anellation Reactions 411
● Carbon Dioxide
- Reaction with Cyclopalladated Complexes 245
- Reaction with 2-Haloalkanols + Ammonium Salts 33
● Carbon Disulfide
- Reaction with Amines 23
● Carbonic Acid Esters
- 1,2-Alkanediyl Carbonates
- Synthesis 33
- 2-Alkenyl Alkyl Carbonates
- Decarboxylation-Carbonylation 814 (7142)
- Reaction with 2-Nitrocycloalkanones 645
- Alkyl 2-Trimethylsilylethyl Carbonates
- Synthesis 830
● Carbon Monoxide
- Reaction with Cyclopalladated Complexes 241
- Reaction with *C*-Halo Compounds 350 (7048)
● Carbonochloridic Acid Esters
- 3-Alkenyl Carbonochloridates
- Cyclization Reactions 228 (7028)
● Carbonochloridothioic Esters
- *O*-Alkyl Carbonochloridothioates
- Reaction with KSCN 975
● Carbon Selenide Sulfide
- Synthesis 204
● Carbon Suboxide
- Cyclization Reactions 1035
● Carbon Suboxide Bis[*O*,*N*-acetals]
- Synthesis and Reactions 1062
● Carbonyl Imines
- Cyclization Reactions 1092
● Carboxamide Enolates
- Reaction with Acrylic Acid Derivatives 417
● Carboximidic Chlorides
- Reduction 967
● Carboximidium Salts
- *O*-Alkylcarboximidium Salts derived from Malonic Diamides
- Synthesis and Reactions 1062
- *N*,*N*-Dialkylformimidium Salts
- Synthesis and Reactions 426
● Carboximidothioic Acid Esters, *N*-Cyano-
- Cyclization Reactions 311
● Carboxylic Acid Amides
- General, *N*-Substituted
- Synthesis 265, 995 (7177)
- General, *N*-Unsubstituted
- Synthesis 517
- Dehydration 184, 350 (7051)
- *N*-(1-Alkoxyalkyl)-carboxamides
- Synthesis 348 (7043)
- *N*-Alkoxycarbonyl-*N*-alkylcarboxamides
- Synthesis and Solvolysis 120 (7021)
- *N*-Alkylcarboxamides
- *N*-Alkoxycarbonylation 120 (7021)
- Conversion into Carboxylic Acids or Esters 120 (7021)
- *N*-Arylcarboxamides
- Reaction with Dialkyl Hydrogen Phosphites 971
- *N*-(2-Chloro-3-pyridinyl)-benzamides
- Synthesis 534
- 2-Acylamino-2-alkenamides
- Synthesis and Cyclization Reactions 285
- 2-Alkenamides
- Cyclization Reactions 305
- 3-Alkenamides
- Synthesis 814 (7142)
- 2-Alkoxy-2-alkenamides
- Synthesis 160
- 2-Alkoxy-3-alkylthio(arylthio)-2-alkenamides
- Synthesis 160
- 2-Alkoxy-4-hydroxy-2-alkenamides
- Synthesis 160
- 2-Alkoxy-3-silyl-2-alkenamides
- Synthesis 160
- 2-Alkyl-2-formylalkanamides
- Synthesis 276
- 4-Alkylthiopyrimidine-5-carboxamides
- Synthesis and Reaction with Amines 861
- 3-Aminoalkanamides
- Synthesis 247
- 3-Amino-3-(3-coumarinyl)-2-cyanopropenamide
- Synthesis 1135
- 4-Aminopyrimidine-5-carboxamides
- Synthesis and Hydrolysis 864
- 3-Aryl-2-cyanopropenamides
- Synthesis and Cyclization Reactions 90
- 2-Arylsulfinyl-3-hydroxyalkanamides
- Synthesis and Reductive Cleavage 561 (7090) (optically active)
- Cyanoacetamide
- Self-condensation 1135
- Formamides
- Synthesis 255, 565 (7103)
- Dehydration 400
- 2-Hydroxyalkanamides
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- 3-Hydroxyalkanamides
- Synthesis 561 (7090)
- α-Hydroxyarylacetamides
- Synthesis 1153
- 2-Mercaptopyridine-3-carboxamides
- Synthesis and Cyclization Reactions 861
- 2-Oxoalkanamides
- Synthesis 255
- 3-Oxoalkanamides
- Synthesis 119 (7020)
- 4-Oxoalkanamides
- Synthesis 417
- 2-Oxocyclohexanecarboxamides
- Cyclization Reactions 1148
- 5-Oxopyrrolidine-2-carboxamide
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- Phenoxyacetamides
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- Synthesis 263, 445 (7073)
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- 3,3'-Dialkoxycarbonylpropanoic Anhydrides
- Synthesis and Reactions 681
● Carboxylic Acid Azides
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● Carboxylic Acid Bromides
- 2,3-Dibromo-2-fluoropropanoyl Bromide
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- Reaction with Organomanganese(II) Iodides 50
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- 2-Alkenoyl Chlorides
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- 3-Chloroalkanoyl Chlorides
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- Reaction with Acrylic Acid Derivatives 417
● Carboxylic Acid Ester Enolates
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- Synthesis 40, 120 (7021), 565 (7104)
- Reaction with Aminoacetonitriles 794
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- Synthesis and Hydrolysis 932
- Alkyl Trifluoroacetates
- Synthesis 759
- 3,7-Dimethyl-2,7-octadienyl Carboxylates
- Synthesis 939
- Diphenylmethyl Carboxylates
- Synthesis 993 (7170)
- 2-Oxoalkyl Carboxylates
- Synthesis 48
- Phenyl Acetates
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- 2-Acylaminobenzoic Esters
- Synthesis 262
- 1-Acylaminocyclopropanecarboxylic Esters
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- Synthesis 177
- 2-Acylimino-3,3,3-trichloropropanoic Esters
- Synthesis 177
- Acyloxyacetic Esters
- Reaction with Electrophiles 815 (7145)
- 2-Acyloxy-3-oxoalkanoic Esters
- Synthesis 815 (7145)
- 2,4-Alkadienoic Esters
- Synthesis 57, 887 (2*E*)(2*Z*)
- 4,8-Alkadienoic Esters
- Synthesis 714 (7126)
- 3,5-Alkadiynoic Esters
- Synthesis 705
- Alkanoic Esters
- Synthesis 257, 262, 266, 320, 555, 907 (7159)
- 2,4,6-Alkatrienoic Esters
- Synthesis 57, 163
- 2,4,8-Alkatrienoic Esters
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- 3,5,8-Alkatriynoic Esters
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- 2-Alkenoic Esters
- Synthesis 135, 258, 262, 266, 379, 386, 721, 813 (7138), 907 (7159), 993 (7169), 1097
- Cyclization Reactions 735
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- 4-Alkenoic Esters
- Synthesis 320, 555, 977, 1166 (7214)
- 5-Alkenoic Esters
- Synthesis 977
- 3-(2-Alkenoylamino)-2-alkenoic Esters
- Synthesis 735
- 3-(2-Alkenoylamino)-3-alkenoic Esters
- Synthesis 735
- 5-Alken-2-ynoic Esters
- Synthesis 705
- 2-Alkoxy-5-chloro-2-alkenoic Esters
- Synthesis and Dehydrochlorination 887
- 2-Alkylidene-3-oxo-4-alkenoic Esters
- Synthesis 387
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- Cyclization Reactions 688
- 2-Alkylthio-3-(2-sulfonyloxyalkyl-amino)-2-alkenoic Esters
- Synthesis and Cyclization Reactions 688
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- 2-Aminoalkanoic Esters
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- Synthesis and Reduction 1125
- 2-Amino-2-alkenoic Esters
- Synthesis 716 (7131)
- 3-Amino-2-alkenoic Esters
- Synthesis 119 (7019)
- Cyclization Reactions 119 (7019), 735
- Reaction with 2-Alkenoic Acid Derivatives 735
- 2-(α-Aminobenzyl)-2-alkenoic Esters
- Synthesis 1082 (7203)
- 2-Amino-5-(2-methoxyethoxy)-alkanoic Esters
- Synthesis and Lactonization 1052
- 3-(Aminomethylenamino)-2-cyano-propenoic Esters
- Synthesis 60
- 2-Amino-6-nitrobenzoic Esters
- Synthesis 220
- 5-Amino-4-oxoalkanoic Esters
- Synthesis 681
- 2-(2-Aminophenylamino)-benzoic Esters
- Synthesis 551
- 2-Amino-4,4,4-trifluoro-3-hydroxy-butanoic Esters and *N,N*-Dibenzyl Derivatives
- Synthesis 850
- 3-Aryl-2-alkenoic Esters
- Synthesis 992 (7166)
- Arylcyanoacetic Esters
- Synthesis 506
- 7-Aryl-2,4,6-heptatrienoic Esters
- Synthesis 163
- Arylhydroxyacetic Esters
- Synthesis 561 (7092)(*R*)
- 3-Arylsulfonylalkanoic Esters
- Synthesis and Desulfonylation 907 (7159)
- 3-Arylthio-3-silylalkanoic Esters
- Synthesis and Dearylsulfenylation 567 (7110)
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- Benzophenone-2-carboxylic Esters
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- 2-Bromo-2-alkenoic Esters
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- Chloroacetic Esters
- Reaction with Dialkyl Hydrogen Phosphites 986
- 3-Chloroalkanoic Esters
- Synthesis 259
- 5-Chloro-2-alkenoic Esters
- Synthesis and Dehydrochlorination 887
- Cinnamic Esters, *o*-substituted
- Synthesis 236
- 2-Cyanoalkanoic Esters
- Dealkoxycarbonylation 320
- 2-Cyano-2-alkenoic Esters
- Reaction with Lithioacetic Esters 1079 (7192)
- 2-Cyano-3-thioacylamino-2-alkenoic Esters
- Synthesis and Cyclization Reactions 86
- Cyclohexylideneacetic Esters
- Synthesis 662 (*S*)(*R*), 1081 (7198)
- Cyclohexyl-(4-methylphenyl-sulfinyl)-acetic Esters
- Synthesis and Desulfinylation 662 (*S, R*) (*R, R*)
- 2,3-Diacyloxy-2-alkenoic Esters
- Synthesis 815 (7145)
- 4,4-Dialkoxyalkanoic Esters
- Synthesis 714 (7125)
- α-(Dialkoxyphosphonyl)-carboxylic Esters
- Synthesis 447 (7080)
- 2-(Dialkoxyphosphonylmethyl)-propenoic Esters
- Synthesis 552
- 3,3-Dialkylalkanoic Esters
- Synthesis 493
- 2,2-Dialkyl-3-oxoalkanoic Esters
- Synthesis 812 (7135)(chiral)
- 2,2-Dialkyl-4-oxoalkanoic Esters
- Synthesis 443 (7068) (chiral)
- 5,5-Dialkylthio-2,4-pentadienoic Esters
- Synthesis 169
- 2,3-Dibromo-2-fluoropropanoic Phenyl Esters
- Synthesis and Debromination 755
- 9,10-Dihydroxyoctadecanoic Esters
- Synthesis and Carboxy Protection 656 (DL-*erythro*)
- 2,5-Dioxoalkanoic Esters
- Synthesis 231 (7033)
- 9,12-Dioxo-10-alkenoic Esters
- Synthesis 988
- 2,3-Disiloxy-2-alkenoic Esters
- Synthesis 815 (7145)
- [9-Doxyl]-alkanoic Esters
- Synthesis and Ester Cleavage 656
- 2-Fluoroacrylic Phenyl Esters
- Synthesis 755
- 2-Fluoroalkanoic Esters
- Synthesis 665
- Formic Esters
- Synthesis 426
- 3-(2-Furyl)-2-alkenoic Esters
- Synthesis 992 (7166)
- 2-Hydroxyalkanoic Esters
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- Synthesis 19, 710 (7115)(chiral) (7116), 722, 997 (7181), 1078 (7188) (*S*)
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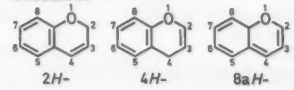
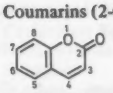


2*H*- 4*H*- 8a*H*-

- Coumarins (2-Oxo-2*H*-chromenes)



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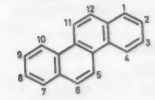
● Chrysene



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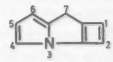

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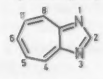

- 2-Oxo-1,2,3,4,5,6,7,8-octahydro-
- Ring Synthesis 307

● Cycloheptanes
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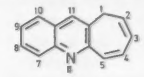

1*H*-
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- 3,4-Dihydroxycyclohexanones
- Synthesis 709 (7114) (enantiomerically pure)
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- 4-Alkyl-2-cyclohexenones
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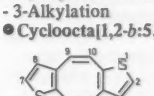
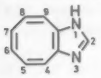
● Cycloocta[1,2-*b*:5,6-*b'*]dithiophene



- 4,5,9,10-Tetrahydro-
- Ring Synthesis 698

● Cycloocta[*d*]imidazole



1*H*-

- 2-Oxo-2,3,4,5,6,7,8,9-octahydro-1*H*-
- Ring Synthesis 307
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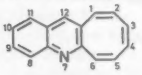

- 1,2,3,4,5,6-Hexahydro-
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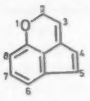
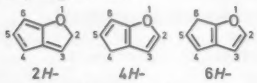


2*H*-

- 3,3a,4,5-Tetrahydro-2*H*-
- Ring Synthesis 1077 (7187)
● Cyclopentadienes, Imino-
- Ring Synthesis 1084
● 1-Cyclopentafuran



2*H*- 4*H*- 6*H*-

- 5-Acetoxy-4-carboxy-2-oxohexahydro- and 5-Hydroxy-4-methoxycarbonyl-2-oxohexahydro-
- Ring Synthesis 491
● Cyclopentanes
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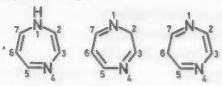

1*H*- 4*H*- 6*H*-

- 5-(2-Hydroxyphenyl)-2,3-dihydro-1*H*-1,4-diazepines
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1*H*- 3*H*-

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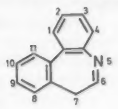
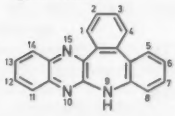
● Dibenzo[*b,d*]azepine



7*H*-

- 6-Alkoxy-7-oxo-7*H*- and 6-Amino-7-oxo-7*H*-
- Synthesis 612
- 7-Oxo-5-tosyl-6,7-dihydro-5*H*-
- Synthesis 612

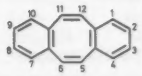
● Dibenzo[4,5:6,7]azepino[2,3-*b*]quinoxaline



9*H*-

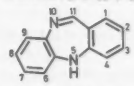
- Ring Synthesis 612

● Dibenzo[*a,e*]cyclooctene



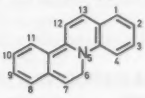
- 5,6,11,12-Tetrahydro-
- Ring Synthesis 698

● Dibenzo[*b,e*][1,4]diazepine



- 10-Oxo-10,11-dihydro-5*H*-
- Ring Synthesis 550

● Dibenzo[*a,f*]quinolizine



6*H*-

- 3,13-Dioxo-1,2,3,4,4a,7,11b,12,13,13a-decahydro-6*H*-
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- Synthesis 1135, 1206
- 3-Amino-4-benzylidene-2-cyano-2-pentenedioic 1-Amide
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- 3-Amino-2-cyano-2-pentenedioic 1-Amide
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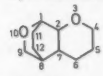

- 5,11-Dienes, 4,9-Dioxo-
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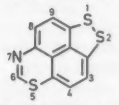

- Ring Synthesis 590
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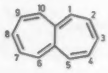

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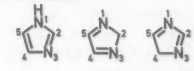

2*H*- 4*H*-

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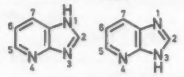

1*H*- 3*H*-

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- 2-Mercapto-
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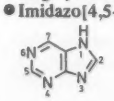

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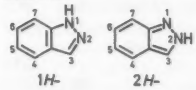
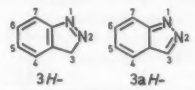


1*H*- 2*H*-



3*H*- 3a*H*-

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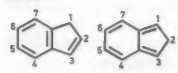

2*H*-

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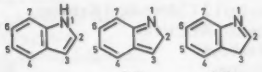

2*H*- 3*H*-

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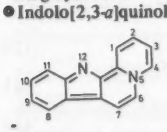
● Indolo[2,3-*a*]quinolizine



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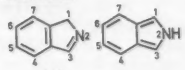

1*H*-

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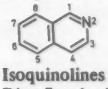

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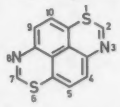

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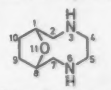

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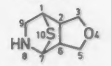

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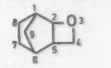

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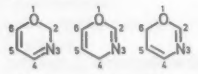

2*H*- 4*H*- 6*H*-

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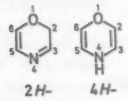
- Ring Synthesis 1149

● 1,4-Oxazine



2*H*- 4*H*-

- Morpholines
- Ring Synthesis 701

● Oxazirine

- Oxaziridines
- Ring Transformation 1092

● 1,2-Oxazole

- 4-Alkoxycarbonyl-5-perfluoroalkyl-3-phenyl-1,2-oxazoles
- Ring Synthesis 970
- 5-Aminiomethyl-1,2-oxazole-3-oxides
- Synthesis 1100
- 5-Chloro-1,2-oxazoles
- Synthesis and Hydrodechlorination 792
- 3-Hydroxy-1,2-oxazole-5-carboxamides
- Synthesis and Reduction 1100
- 3-Hydroxy-1,2-oxazole-5-carboxylic Esters
- Ring Synthesis and Reactions 1100
- 3-Hydroxy-1,2-oxazoles
- Ring Synthesis and Cleavage 119 (7020)
- 5-Silyltetrahydro-1,2-oxazoles
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● 1,3-Oxazole

- 1,3-Oxazoles
- Ring Synthesis 352 (7058)
- 2-Mercapto-1,3-oxazoles
- Ring Synthesis 567 (7110)
- 4,5-Dihydro-1,3-oxazoles
- Ring Synthesis 352 (7059), 656
- Ring Cleavage 656
- 4-Alkylidene-5-oxo-4,5-dihydro-1,3-oxazoles
- Ring Cleavage 48, 285
- Cyclopropane(spiro-4)-5-oxo-4,5-dihydro-1,3-oxazoles
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- Tetrahydro-1,3-oxazoles
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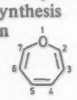
- Synthesis and Reactions 852
- 2-Oxotetrahydro-1,3-oxazoles
- Ring Synthesis 1144

● Oxepin



- Ring Synthesis 577

● Oxete

- Oxetanes
- Ring Synthesis 1016
- Cyclohexane(spiro-2)-3-oxetanone
- Ring Synthesis 1129
- 2,3-Diiminooxetanes
- Ring Synthesis and Transformation 1086
- 2-Oxo-3-vinyloxetane
- Ring Synthesis 261
- Steroid(17-spiro-2)-3-oxetanones
- Synthesis 1129

● Oxime Derivatives

- *O*-Benzyl-β-hydroxyketoximes
- Synthesis and Reduction 560 (7089)

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- Aldoximes
- Dehydration 201
- Ketoximes
- Synthesis 6
- Rearrangement 995 (7177)
- Reduction 563 (7097)
- 4-Oximino-1,2-alkadienes
- Synthesis 135
- 2-Oximino-1,3-dicarbonyl Compounds
- Cyclization Reactions 300

● Oxirene

- Oxiranes
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- Reactions with Carbodiimides and Isocyanates 1144
- Oxiranes, 2,3-disubstituted
- Ring Synthesis 998 (7183) (*trans*)
- Alkoxymethyloxiranes
- Synthesis 503 (*S*)
- Arylsulfonyloxiranes
- Ring Synthesis and Clevage 564 (7099)
- Oxiranyldiphenylphosphine Oxides
- Ring Synthesis 65

● Oxocarbon Betaines

- Synthesis 1055

● Palladium Complexes (cyclopalladated)

- Synthesis and Use 233 (review)

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Penam

- Penicillanic Esters
- Synthesis 749
- 6-(1-Alkoxyalkylideneamino)-penicillanic Esters
- Synthesis 693
- 6-Aminopenicillanic Esters
- Synthesis and Reaction with Trialkyl Orthocarboxylates 693
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● Pentalene

- Pentalenes
- Ring Synthesis 136
- 3-Alkylthio-2-oxo-1,2,4,5,6,6a-hexahydropentalenes
- Ring Synthesis 643
- 5-Oxo-1,2,3,3a,4,5-hexahydropentalenes
- Ring Synthesis 377
- 5-Methylene-1-oxooctahydropentalenes
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- 1-Oxooctahydropentalenes
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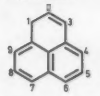
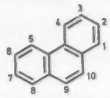
- Cyclic Dipeptides
- Synthesis 181
- Dipeptides
- Synthesis 738
- *Retro-Inverso* Peptides
- Synthesis 294
- Sterically Hindered Peptides
- Synthesis 22

● Phenalene



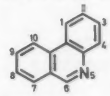
- 9-Amino-1-alkoxyphenalenium Tetrafluoroborates
- Synthesis 639
- 9-Amino-1-oxo(thioxo)-phenalenes and Derivatives
- Synthesis and Reactions 639
- 9b-Hydroxydodecahydrophenalene
- Ring Synthesis 257

● Phenanthrene



- 9-Hydroxy-1-oxo-1,2,3,4-tetrahydro-phenanthrenes
- Ring Synthesis 784

● Phenanthridine



- Ring Synthesis 107

● Phenols

- Synthesis 274
- Oxidation 641
- 4-Aminomethylphenols
- Synthesis 133
- Nitrophenols
- Synthesis 916
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- 6,10-Dimethyl-9-methylene-5-undecen-2-one 950 (*E*)
- 3,7-Dimethyl-2,7-octadienyl Propanoate (San José Scale Pheromone) 939 (*Z*) (*E*)
- 8,10-Dodecadienol 126
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- Synthesis and Hydrazone Cleavage 1048
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- Synthesis 65
- Iodomethyldiarylphosphine Oxides
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- 2-Oxoalkyldiphenylphosphine Oxides
- Synthesis 1048
● Phosphines
- Arylphosphines
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- Trialkylphosphines
- Cyclization Reactions 1067
● Phosphinic Acid Esters
- *P*-Phenylalkanephosphinic Esters
- Synthesis 896
- *P*-Phenyl-1-hydroxyalkanephosphinic Esters
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- Synthesis 464 (review)
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- 1-Amino-2-chloroethanephosphonic Esters
- Synthesis 62, 1206
- 1-Amino-2,2,2-trichloroethanephosphonic Esters
- Synthesis and Hydrodechlorination 62
- Chloro-(phenylsulfonyl)-methanephosphonic Esters
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- Chloro-(phenylthio)-methanephosphonic Esters
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- Reaction with Aldehydes 1097
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- Synthesis 986
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- Synthesis 447 (7080)
- 2,2-Diamino-1-diazoethanephosphonic Esters
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- 3-Oxo-2-triphenylphosphoranylidene-alkanedioic Esters
- Synthesis and Thermolysis 764
- 1-(Trimethylsilylmethyl)-alkylidene-triphenylphosphoranes
- Synthesis and Reactions 732
- Trimethylsilylmethylenetriphenyl-phosphoranes
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- Synthesis 449 (review)
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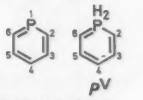
- Synthesis 462, 463
- Phosphoric Monoesters
- Synthesis 452, 462
- Tetraalkyl 2-Butyne-1,4-diyl bis-phosphates
- Synthesis and Reactions 963
● Phosphorin



*p*V

- Ring Synthesis 134
● Phthalides
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● Phthalocyanines
- Synthesis 7
● 7-*epi*-Pinguisone, 3-Oxo-2,3-dihydro-
- Synthesis 372
● Plumbagin (Synthesis) 125
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- 1,3,5-Triformylbenzenes
- Synthesis 779
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● Potassium, Organic Derivatives
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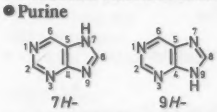
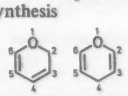
● Prostaglandines and Relatives
- Synthesis 238
● Prostanoid Synthons
- Synthesis 491
● Pummerer Reaction Intermediates 643
● Purine



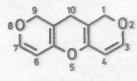
7*H*- 9*H*-

see also: Adenines, Uracils, Xanthines, etc.
- 8-Arylamino- and 8-Heteroarylamino-purines
- Ring Synthesis 867
- 6-Arylamino-9*H*-purines
- Ring Synthesis 104
● Pyran



2*H*- 4*H*-

- 1,1-Bis[4-hydroxy-2-oxo-2*H*-pyran-3-yl]-alkanes
- Cyclization Reactions 698
- 4-Diazophosphonylmethyl-4*H*-pyrans
- Synthesis 577
- 2-Oxo-2*H*-pyrans (2-Pyrones)
- Dimerization 1012
- 2-Thioxo-2*H*-pyrans
- Synthesis 328
- 5,6-Dihydro-2*H*-pyrans
- Ring Synthesis 928, 1005
- 2-Oxo-5,6-dihydro-2*H*-pyrans
- Ring Synthesis 380, 387
- 2,3-Dihydro-4*H*-pyrans
- Ring Synthesis 1006
- 6-Amino-5-aminocarbonyl-2,4-dioxo-2,3-dihydro-4*H*-pyrans
- Ring Synthesis 1062
- 2-Alkoxytetrahydropyrans
- Synthesis 703
- 2-(1-Iodoalkyl)-tetrahydropyrans
- Ring Synthesis 903 (7149)
- Tetrahydropyran-2-acetic Esters
- Ring Synthesis 262
- Tetrahydropyran-3-carboxylic Esters
- Ring Synthesis 566 (7106)
- 2-(2-Tetrahydropyranyl)-alkanoic Esters
- Ring Synthesis 566 (7106)
● Pyrano[3,2-*c*:5,6-*c*']dipyran

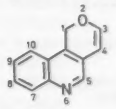


1*H*,9*H*,10*H*-

- 1,9-Dioxo-1*H*,9*H*,10*H*-
- Ring Synthesis 699
● Pyrano[2,3-*c*]pyrazole

- 1,4-Dihydro-
- Ring Synthesis 432
- 3-Oxooctahydro-
- Ring Synthesis 1037
● Pyrano[3,2-*b*]pyrrole

- 5-Oxo-1,5-dihydro-
- Ring Synthesis and Transformation 614
● Pyrano[4,3-*c*]quinoline



1*H*-

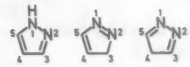
- 5-Chloro-1-oxo-3,4-dihydro-1*H*-
- Synthesis and Ring Cleavage 541
- 1,5-Dioxo-3,4,5,6-tetrahydro-1*H*-
- Ring Synthesis and Chlorination 541
● Pyrano[2,3-*d*][1,3]thiazole

4*H*-

- 2-Oxo-1,2-dihydro-4*H*-
- Ring Synthesis 432
● Pyrazine

- Pyrazines
- *N*-Oxidation 216
- Pyrazine *N*-Oxides
- Synthesis 216
- Pyrazine 1,4-Dioxides
- Synthesis 216
- 1,4-Dihydropyrazines
- Ring Synthesis 186
- 2,3-Dihydropyrazines
- Ring Synthesis 313
- 3,6-Dialkyl-2,5-dimethoxy-3,6-dihydropyrazines ("Bis-lactim Ethers")
- Synthesis and Cleavage 55 (3*R*, 6*S*, 1'*S*)

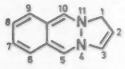
● Pyrazole



3*H*- 4*H*-

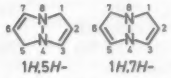
- Pyrazoles
- Ring Synthesis 690, 728
- 3,4- and 4,5-Diaminopyrazoles
- Ring Synthesis 794
- Pyrazole-4-carboxylic Esters
- Ring Synthesis 333
- 16,17-Pyrazolo-fused Steroid Derivatives
- Ring Synthesis 307
- 4,5-Dihydropyrazoles (2-Pyrazolines)
- Ring Synthesis 1014, 1028 (review)
- 4,5-Dihydro-3*H*-pyrazoles
- Ring Synthesis 1014
- 1-Aryl-4,5-dihydropyrazoles
- Synthesis 296
- 5-Arylazo-4,5-dihydropyrazoles
- Ring Synthesis and Reduction 296
- 4-Bromo-5-oxo-1-phenyl-4,5-dihydropyrazoles
- Synthesis 299
- 4-Chloro-5-oxo-1-phenyl-4,5-dihydropyrazoles
- Synthesis 299
- 4-(2-Hydroxy-3-pyrazolylmethylene)-5-oxo-4,5-dihydropyrazoles
- Synthesis 550
- 3-(2-Hydroxyphenyl)-5-oxo-4,5-dihydropyrazoles
- Ring Synthesis and Cyclization Reactions 548
- 3,5-Dioxotetrahydropyrazoles (3,5-Dioxopyrazolidines)
- Ring Synthesis 1034
- 4-Oxotetrahydropyrazoles (4-Oxopyrazolidines)
- Ring Synthesis 1092

● Pyrazolo[1,2-*b*]phthalazine



- 1,3-Dioxo-2,3,5,10-tetrahydro-
- Ring Synthesis 1037

● Pyrazolo[1,2-*a*]pyrazole



1*H*,5*H*- 1*H*,7*H*-

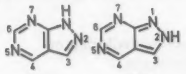
- 1,3,5,7-Tetraoxotetrahydro-
- Ring Synthesis 1035

● Pyrazolo[3,4-*b*]pyridine

1*H*-

- Ring Synthesis 861

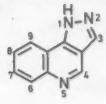
● Pyrazolo[3,4-*d*]pyrimidine



1*H*- 2*H*-

- 3-Hydroxy-1*H*-
- Ring Synthesis 861
- 4,6-Dioxo-4,5,6,7-tetrahydro-1*H*-
- Ring Synthesis 190

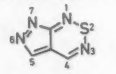
● Pyrazolo[4,3-*c*]quinoline



1*H*-

- 5-Hydroxy-4-oxo-4,5-dihydro-1*H*-
- Ring Synthesis and Reduction 331
- 4-Oxo-4,5-dihydro-1*H*-
- Synthesis 331

● Pyrazolo[3,4-*d*]-2,1,3-thiadiazine



- 4-Oxo-1,3,4,7-tetrahydro-
- Ring Synthesis 190

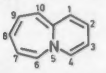
● Pyridazine

- Pyridazines
- Ring Synthesis 575
- 4-Amino-3-carboxy-6-oxo-1,6-dihydropyridazines
- Ring Synthesis 1135

● Pyridine

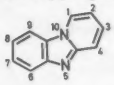
- 2-Aminopyridines
- Ring Synthesis 138
- Anellation Reactions 892
- 3-Amino-2-chloropyridines
- Anellation Reactions 533
- 2- and 3-Hydroxyacetylpyridine
- Synthesis 943
- 2-Mercaptopyridine-3-carboxamides
- Ring Synthesis and Anellation Reactions 861
- Pyridine-3,5-dicarboxylic Esters
- Synthesis 915
- 2-Pyridinylcyanoacetamides
- Ring Synthesis 1135
- 3-Cyano-2-selenoxo-1,2-dihydropyridines
- Ring Synthesis 98
- 1,2- and 2,3-Dihydropyridin-2-ylidenecyanoacetamides
- Ring Synthesis 1135
- 2-Oxo-1,2-dihydropyridines (2-Pyridones)
- Synthesis 305, 328
- 1,4-Dihydropyridine-3,5-dicarboxylic Esters
- Dehydrogenation 915
- 1,2,3,4-Tetrahydropyridines
- Synthesis 210 (all-*trans* substituted)
- 1,2,3,6-Tetrahydropyridines
- Ring Synthesis 1007
- 2-Oxo-1,2,3,4-tetrahydropyridines
- Ring Synthesis 305
- Piperidines
- Synthesis 210 (all-*trans* substituted)

● Pyrido[1,2-*a*]azepine



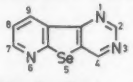
- 1-Alkoxycarbonyl-4-oxo-2,3,4,6,7,8,9,10-octahydro-
- Ring Synthesis 735

● Pyrido[1,2-*a*]benzimidazole



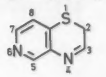
- Ring Synthesis 329

● Pyrido[2',3':2,3]selenolo[4,5-*d*]pyrimidine



- Ring Synthesis 98

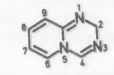
● Pyrido[4,3-*b*]-1,4-thiazine



2*H*-

- 4-Hydroxy-3-oxo-3,4-dihydro-2*H*- and 3-Oxo-3,4-dihydro-2*H*-
- Ring Synthesis 331

● Pyrido[1,2-*a*]-1,3,5-triazine

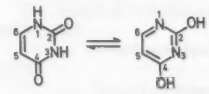


2*H*-

- 2,4-Dioxo-2,3-dihydro-4*H*-
- Ring Synthesis 892

● Pyrimidine

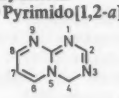
- 4-Alkylthiopyrimidine-5-carboxamides
- Synthesis and Reactions 861
- 4-Aminopyrimidine-5-carboxamides
- Synthesis and Hydrolysis 861
- 2-Aminopyrimidines
- Anellation Reactions 892
- 2,2'-Dioxo-1,1',2,2'-tetrahydro-1,1'-bipyrimidines
- Ring Synthesis 1146
- 1,4-Dihydropyrimidines
- Synthesis 528
- 5-Alkoxycarbonyl-6-oxo(and thioxo)-1,6-dihydropyrimidines
- Ring Synthesis 86
- 6-Amino-5-aminocarbonyl-2-thioxo-1,2,3,4-tetrahydropyrimidines
- Ring Synthesis 89
- 2,4-Dithioxo-1,2,3,4-tetrahydropyrimidines (Uracils)



- Synthesis and Reduction of 1-Iodomethyl Derivatives 323
- Synthesis of 5-Amino Derivatives 80
- *N*-Alkylation 323, 543
- 4-Amino-2-thioxo-1,2,5,6-tetrahydropyrimidines
- Ring Synthesis 89
- 6-Hydroxy-1,4,5,6-tetrahydropyrimidines
- Ring Synthesis and Dehydration 528

- 2,4-Dioxohexahydropyrimidines (Dihydrouracils)
- *N*-Alkylation 424
- 2,4-Dioxo-1-iodomethylhexahydropyrimidines
- Synthesis and Dealkylation 323
- 4-Oxo-2-thioxohexahydropyrimidines
- Synthesis 89, 686, 1206

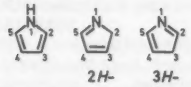
● Pyrimido[1,2-*a*]-1,3,5-triazine



4*H*-

- 2,4-Dioxo-2,3-dihydro-4*H*-
- Ring Synthesis 892

● Pyrrole



2*H*- 3*H*-

- Pyrroles, 3-substituted
- Synthesis 353 (review)
- 2-Acylamino-3-aminocarbonylpyrroles
- Synthesis and Cyclization Reactions 102
- 3-Alkoxycarbonyl-2-aminopyrroles
- Ring Synthesis 291
- 2-Aminopyrrole-3-carboxylic Esters
- Cyclization Reactions 796
- 3,4-Dialkoxycarbonylpyrroles
- Ring Synthesis 232 (7035)
- 2-Trichloroacetyl-4-cyanopyrrole
- Synthesis 355
- 1-Ureidopyrroles
- Ring Synthesis 157
- 2-Amino-2,3-alkanediyl-3-oxo-2,3-dihydropyrroles
- Ring Synthesis 619
- 3,4-Dialkoxycarbonyl-2,3-dihydropyrroles
- Ring Synthesis 232 (7035)
- 2-Oxo-2,3-dihydropyrrole-4-carboxylic Esters
- Ring Synthesis 1043
- 2-(1-Alkenyl)-3,4-dialkoxycarbonyl-2,5-dihydropyrroles
- Ring Synthesis 232 (7036)
- Pyrrolidines
- Ring Synthesis 732
- 2-(1-Alkenyl)-3-alkoxycarbonylpyrrolidines
- Ring Synthesis 232 (7036)
- 3-Methylene-2-oxopyrrolidines
- Ring Synthesis 84
- Pyrrolidin-2-ylideneacetic Esters
- Ring Synthesis 119 (7019)

● Pyrrolizine

1*H*-

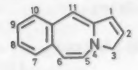
- 7a-Amino-1-oxo-5,6,7,7a-tetrahydro-1*H*-pyrrolizines
- Ring Synthesis 619

● Pyrrolo[1,2-*a*]azepine

1*H*-

- 9a-Amino-1-oxo-5,6,9,9a- and -5,8,9,9a-tetrahydro-1*H*-
- Ring Synthesis 619
- 9a-Amino-1-oxo-5,6,7,8,9,9a-hexahydro-1*H*-
- Ring Synthesis 619

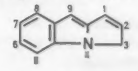
● Pyrrolo[2,1-*b*][3]benzazepine



3*H*-

- 11a-Amino-3-oxo-5,6,11,11a-tetrahydro-3*H*-
- Ring Synthesis 619

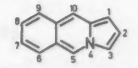
● Pyrrolo[1,2-*a*]indole



3*H*-

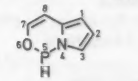
- 9a-Amino-3-oxo-9,9a-dihydro-3*H*-
- Ring Synthesis 619

● Pyrrolo[1,2-*b*]isoquinoline



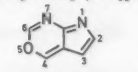
- 10a-Amino-3-oxo-3,5,10,10a-tetrahydro-
- Ring Synthesis 619

● Pyrrolo[1,2-*c*][1,3,2]oxazaphosphorin



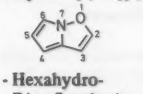
- 2-Alkoxy-2-oxo-P^V-
- Ring Synthesis 459

● Pyrrolo[2,3-*d*][1,3]oxazine



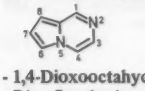
- 2,4-Dioxo-1,2,4,7-tetrahydro-
- Ring Synthesis 786

● Pyrrolo[1,2-*b*][1,2]oxazole



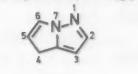
- Hexahydro-
- Ring Synthesis 1015

● Pyrrolo[1,2-*a*]pyrazine



- 1,4-Dioxooctahydro-
- Ring Synthesis 181

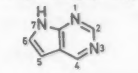
● Pyrrolo[1,2-*b*]pyrazole



4*H*-

- 5,6-Dihydro-4*H*-
- Ring Synthesis 138

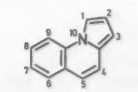
● Pyrrolo[2,3-*d*]pyrimidine



5*H*-

- 4-Oxo-3,4-dihydro-7*H*-
- Ring Synthesis 102

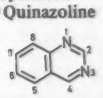
● Pyrrolo[1,2-*a*]quinoline



- 3a-Amino-1-oxo-1,3a,4,5-tetrahydro-
- Ring Synthesis 619

● Quaternary C-Centers, Chiral
- Synthesis 710 (7115)

● Quinazoline

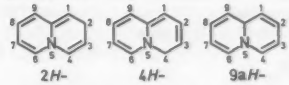


- 4-Oxo-1,4-dihydroquinazolines
- Ring Synthesis 8
- 2,4-Dioxo-1,2,3,4-tetrahydroquinazolines
- Ring Synthesis 8
- 4-Oxo-3,4,5,6,7,8-hexahydroquinazolines
- Synthesis 1148
- 4-Oxo-1,2,3,4,5,6,7,8-octahydroquinazolines
- Ring Synthesis 1148, 1206

● Quinoline

- Quinolines
- Ring Synthesis 239
- 4-Amino-2,3-alkanediylquinolines
- Ring Synthesis 547
- 4-Aminocarbonyl-2-chloro-3-(2-hydroxyalkyl)-quinolines
- Synthesis and Anellation Reactions 541
- 3-(1-Alkenyl)-4-carboxy-2-oxo-1,2-dihydroquinolines
- Ring Synthesis and Anellation Reactions 541

● Quinolizine



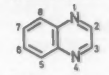
2*H*- 4*H*- 9a*H*-

- 1-Alkoxycarbonyl-4-oxo-1,2,3,6,7,8- and -2,3,6,7,8,9-hexahydroquinolizines
- Ring Synthesis 735

● Quinols
- 4-Alkyl-4-hydroxy-1-oxo-1,4-dihydronaphthalenes
- Reaction with Aldehydes and Ketones 29

● Quinones
- 5-Amino-8-hydroxy-1,4-naphthoquinones and *O*-Derivatives
- Synthesis 781
- *o*-Benzoquinones
- Synthesis 641
- *p*-Benzoquinones
- Synthesis 641
- 2,3-Dialkylthio-1,4-benzoquinones
- Synthesis 137
- 5-Hydroxy-2-methyl-1,4-naphthoquinone (Plumbagine)
- Synthesis 125
- 5-Hydroxy-1,4-naphthoquinones
- Synthesis 781
- Trifluoromethyl-1,4-benzoquinone
- Synthesis 1120

● Quinoxaline



- Quinoxalines
- Ring Synthesis 313
- 2-Acyl- and 2-Alkoxycarbonylquinoxaline 1,4-Bis-oxides
- Ring Synthesis 938

● Ranitidine (Synthesis) 509
● Ruthenocenes, functionally substituted
- Synthesis 236

● [1,2]Selenazolo[4,3-*d*]pyrimidine

- 5,7-Dioxo-4,5,6,7-tetrahydro-
- Ring Synthesis 695
● Selenenic Acid Amides
- Synthesis 635 (asymmetric)
● Selenocarboxylic Acid Amides
- Cyanoselenoacetamide
- Synthesis and Cyclization Reactions 98
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- *Se*-Aryl Alkaneselenoates
- Synthesis 212, 520
- *Se*-Aryl Areneselenocarboxylates
- Synthesis 520
● Selenoethers
- 2-Alkylselenopyridines
- Synthesis 98
- Aryl Perfluoroaryl Selenides
- Synthesis 667
- 1-Bromo-2-phenylseleno-1-alkenes
- Synthesis 212
- Difluoromethyl Aryl Selenides
- Synthesis 497
- 1-Iodo-2-phenylseleno-1-alkenes
- Synthesis 212
- Trifluoromethyl Aryl Selenides
- Synthesis 667
● Selenolates
- Copper(I) Trifluoromethaneselenolate and Pentafluorobenzeneselenoate
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- Ring Synthesis 98
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- *S*-Acyl *Se*-Aryl Selenosulfides
- Synthesis 878
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- Synthesis 962
- 1-Alkenyldialkylarylsilanes
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- 2-Alkenyldialkylarylsilanes
- Synthesis 996 (7178)
- 1-Alkenyltrialkylsilanes
- Synthesis 352 (7056), 996 (7178)
- 2-Alkenyltrialkylsilanes
- Synthesis 996 (7178)
- Reactions with 5-Alken-4-olides and 4-Alken-6-olides 714 (7126)
- Reaction with 1,3-Dioxans 992 (7167)
- Reaction with 4-Oxo-1,3-dioxolanes 905 (7155)
- 4-Alkenyltrialkylsilanes
- Synthesis 977
- Alkyltriarylsilanes
- Synthesis 836
- 1-Alkynyltrialkylsilanes
- Synthesis 722
- Reaction with *S*-Alkyl Thiocarboxylates 351 (7053)
- 2-Alkynyltrialkylsilanes
- Synthesis 732
- Aminomethyltrimethylsilanes
- Synthesis 730
- 1,4-Bis[allyldimethylsilyl]-2-butene
- Synthesis 1059
- 1,4-Bis[aryldimethylsilyl]-2-butenes
- Synthesis 1059
- 1,4-Bis[ethenyldimethylsilyl]-2-butene
- Synthesis 1059
- 1,4-Bis[trimethylsilyl]-2-butene
- Synthesis 1059
- 1-Bromo-2-alkenyltrialkylsilanes
- Synthesis and Reactions 996 (7179)
- 1-Chloro-2-alkenyltrialkylsilanes
- Synthesis and Reactions 996 (7179)
- Dimethylsilanone
- Generation 131
- Disilylacetylenes
- Cyclization Reactions 871
- 3,4-Disilyl-2-butenols
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- Trialkylarylsilanes
- Reaction with BF_3 or HBF_4 568 (7111)
- 2-Trimethylsilyl-1,3-butadiene
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- 2-Trimethylsilylmethyl-1,3-butadiene
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- Silyl Carboxylates
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- Arylsodium
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● Stabase Compounds
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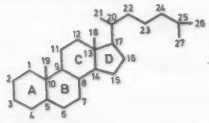
● Stannanes
see: Tin, Organic Derivatives
● Stannylcuprates
- Reactions 899
● Steroids and Relatives (Synthesis)



- 16,16-Bis[hydroxymethyl]-17-oxosteroids and Acetates thereof 194
- 16α,17α-Epimino-21-hydroxy-20-oxosteroids 326
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- 16α,17α-Epoxy-21-hydroxy-20-oxosteroids 326
- 20,21-Epoxy-20-methoxysteroids 326
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- 17-Hydroxy-16,16-bis[hydroxymethyl]-steroids and Acetates thereof 194
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- 16,17-Pyrazolo-fused Derivatives of A-Homosteroidal Ring A Lactams 307
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- Tetrahydro-1,2-oxazole-fused Steroids 1015
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- Reaction with Enamines 66
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- Synthesis 935
- *N*-Monosubstituted Sulfamic Esters
- *N*-Alkylation and *N*-Arylation 935
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- *N*-Aryl-1-alkynesulfenamides
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- Reaction with Alkenes 567 (7108)
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- *Se*-Aryl Oxoarylmethanesulfenoselenoates
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- Synthesis 676 (*Z*)
- Bromo-(methylthio)-methyl Aryl Sulfones
- Synthesis 524
- 1-Chloro-1-alkenyl Aryl Sulfones
- Synthesis and Hydrodechlorination 676 (*Z*)
- Chloro-(methylthio)-methyl Aryl Sulfones
- Synthesis 524
- Dibromo-(methylthio)-methyl Aryl Sulfones
- Synthesis 524
- Dichloro-(methylthio)-methyl Aryl Sulfones
- Synthesis 524
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- Synthesis 524
- α-Methylthiobenzyl Phenyl Sulfones
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- 2-Oxoalkanesulfonamides
- Synthesis 66

● Sulfonic Acid Anhydrides
- Arenesulfonic Anhydrides
- Reaction with *O*-Acylenols 760
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- Reaction with Silyl Ethers 759

● Sulfonic Acid Azides
- Synthesis 914

● Sulfonic Acid Chlorides
- Trimethylsilylmethanesulfonic Chloride
- Synthesis 731

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- Arenesulfonothioic *S*-Esters
- Synthesis and Reaction with Enolizable Ketones 351 (7055)

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- 2-Alkenyl Aryl Sulfoxides
- Synthesis 566 (7107) (chiral)
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- Alkyl 2-Oxo-4-alkenyl Sulfoxides
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- Aryl Imidomethyl Sulfoxides
- Synthesis 276

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- *S*-Iodomethyl-*S*-phenyl-*N*-tosyl-sulfoximine
- Synthesis 982

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● Tetrazenes
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- as Intermediates 264

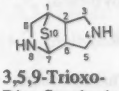
● 2-Thiabicyclo[2.2.1]heptane

- 2-Thiabicyclo[2.2.1]hept-5-ene 2,2-Dioxide
- Ring Synthesis 731

● 7-Thiabicyclo[2.2.1]heptane

- 7-Thiabicyclo[2.2.1]hept-5-ene-2,3-dicarboxylic Anhydrides
- Ring Synthesis 1011

● 10-Thia-4,8-diazatricyclo[5.2.1.0^{2,6}]decane



- 3,5,9-Trioxo-
- Ring Synthesis 430

● 1,2,3-Thiadiazole

- 1,2,3-Thiadiazole
- 4-Substitution via Lithiation 945
- 5-Acylamino-1,2,3-thiadiazoles
- Ring Synthesis 583

● 1,2,4-Thiadiazole

- 5-Imino-2,5-dihydro-1,2,4-thiadiazoles
- Ring Synthesis 83
- 5-Alkylidenehydrazono-3-oxotetrahydro-1,2,4-thiadiazoles
- Ring Synthesis 692

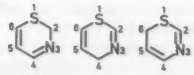
● 1,3,4-Thiadiazole

- 2-Acylimino-2,3-dihydro-1,3,4-thiadiazoles
- Ring Synthesis 277

● 1,3-Thiazete

- 4-Alkylidene-2-imino-1,3-thiazetidines
- Ring Synthesis 1088

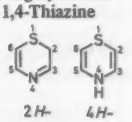
● 1,3-Thiazine



2*H*- 4*H*- 6*H*-

- 2-Amino-4-oxo-5,6-dihydro-4*H*-1,3-thiazines
- Ring Synthesis 933

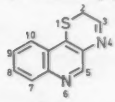
● 1,4-Thiazine



2*H*- 4*H*-

- 2,3-Dihydro-4*H*-1,4-thiazines and 2,3-Dihydro-4*H*-1$^{\bullet}$,1,4-thiazinium Salts
- Ring Synthesis 688

● 1,4-Thiazino[3,2-*c*]quinoline



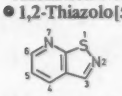
2*H*-

- 4-Hydroxy-3-oxo-3,4-dihydro-2*H*-
- Ring Synthesis and Reduction 331
- 3-Oxo-3,4-dihydro-2*H*-
- Ring Synthesis 331

● 1,3-Thiazole

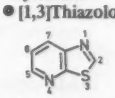
- 1,3-Thiazoles
- Ring Synthesis 414, 948
- 2-Alkylthio-1,3-thiazoles
- Ring Synthesis 948
- 2-Amino-1,3-thiazoles
- Ring Synthesis 414
- Chlorinated 1,3-Thiazoles
- Ring Synthesis 586 (review)
- 4-Oxotetrahydro-1,3-thiazoles
- Anellation Reactions 432
- 4-Thioxotetrahydro-1,3-thiazoles
- Anellation Reactions 432

● 1,2-Thiazolo[5,4-*b*]pyridine



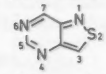
- 3-Oxo-2,3-dihydro-, 1-Oxides, and 1,1-Dioxides
- Synthesis 861

● [1,3]Thiazolo[5,4-*b*]pyridine, 2-Aryl-



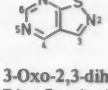
- Ring Synthesis 533

● [1,2]Thiazolo[4,3-*d*]pyrimidine



- 5,7-Dioxo-4,5,6,7-tetrahydro-
- Ring Synthesis 695

● 1,2-Thiazolo[5,4-*d*]pyrimidine



- 3-Oxo-2,3-dihydro-
- Ring Synthesis 861

● [1,3]Thiazolo[5,4-*d*][1,3]thiazole, Dichloro-

- Ring Synthesis 588

● Thieno[2,3-*d*]pyrimidine

- 2,4-Dioxo-1,2,3,4,5,6-hexahydro-
- Ring Synthesis 190

● Thieno[2,3-*b*]pyrrole

6*H*-

- Ring Synthesis 143 (review)
- 4,5-Dioxo-4,5-dihydro-6*H*-
- Ring Synthesis 147

● Thieno[3,2-*b*]pyrrole

4*H*-

- Ring Synthesis 143 (review)
- 5,6-Dioxo-5,6-dihydro-4*H*-
- Ring Synthesis 147
- 3-Oxo-2,3-dihydro-4*H*-
- Ring Synthesis 149

● Thieno[3,4-*b*]pyrrole

6*H*-

- Ring Synthesis 143 (review)

● Thieno[2,3-*c*]pyrrole

5*H*-

- Ring Synthesis 143 (review)
- 5,6-Dihydro-4*H*- and 5-Oxide
- Ring Synthesis 147
- 4,6-Dioxo-5,6-dihydro-4*H*-
- Ring Synthesis 148

● Thieno[3,4-*c*]pyrrole

4*H*-

S^{IV}- 5*H*-

- Ring Synthesis 143 (review)
- S^{IV}-5*H*-
- Ring Synthesis 143 (review)
- 5,6-Dihydro-4*H*-
- Ring Synthesis 148
- 4,6-Dioxo-5,6-dihydro-4*H*-
- Ring Synthesis 148
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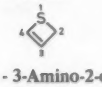
- Ring Synthesis 149
- 1,3,5,6-Tetrahydro-4*H*-
- Ring Synthesis 148
- Hexahydro-
- Ring Synthesis 148
- 4,6-Dioxohexahydro-
- Ring Synthesis 150

● Thiete



- 3-Amino-2-oxothietanes
- Ring Synthesis 448 (7082) (optically active)
- 2,4-Diiminothietanes
- Ring Synthesis 1094
- Triiminothietanes
- Ring Synthesis 1089
- 2-Vinylthietanes
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● Thiine (Thiopyran)

2*H*- 4*H*- S^{VI}

- 3-Bromo-2-oxo-2*H*-thiines
- Synthesis 328
- 2-Oxo-2*H*-thiines
- Ring Synthesis 328
- 6-Amino-2-alkylthio-4-oxo-4*H*-thiines
- Ring Synthesis 531
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● Thioaldehydes
- Generation 131

● Thiocarbamic Acid Esters (Carbamothioic Acid Esters)
- *N*-(2-Alkoxycarbonylbenzoyl)-carbamothioic *O*-Esters
- Synthesis and Cyclization Reactions 423

● Thiocarbonic Acid Esters
- *O*-Benzyl *S*-(2-Pyridinyl) Thiocarbonate
- Synthesis and Reactions 738

● Thiocarboxylic Acid Amides
- Cyclization Reactions 94, 430
- Alkanethioamides
- Synthesis 77
- (Arylhydrazinocarbonyl)-thioacetamides
- Synthesis and Cyclization Reactions 861
- Arylsulfonylalkanethioamides
- Synthesis 907 (7159)
- *N*-[α-(Benzylidenamino)-benzyl]-thiocarboxamides
- Synthesis 92
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- Nitrilothioacetamides
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- 2-Oxoalkanethioamides
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- *N*-(3-Pyridinyl)-thiobenzamides
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● Thiocarboxylic Acid Esters
- 2-Alkenethioic *O*-Esters
- Synthesis 960
- *S*-(1-Alkenyl) Thiobenzoates
- Synthesis 632
- *O*-Alkyl Thiocarboxylates
- Synthesis 814 (7143)
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- *S*-Alkyl Thiocarboxylates
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- Dialkoxyphosphonyl-thioacetic *O*-Esters
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● Thiocyanates
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- Alkyl 1-Silyl-1-alkenyl Sulfides
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- Synthesis 667
- Aryl 1-Silyl-1-alkenyl Sulfides
- Synthesis 1082 (7202)
- Bis[1-alkenyl] Sulfides
- Synthesis 632
- 1-Chloro-1-alkenyl Aryl Sulfides
- Synthesis 676
- Dialkyl Sulfides
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● Thiohydantoins
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● Thiomalonic Acid Amides (Monothio-)
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- 4-Cyano-3-oxotetrahydrothiophenes
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- Synthesis and Reactions 204
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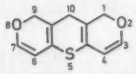
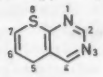
see: Thiine
● Thiopyrano[3,2-*c*:5,6-*c'*]dipyran



1*H*,9*H*,10*H*-
- 1,9-Dioxo-1*H*,9*H*,10*H*-
- Ring Synthesis 699
● Thiopyrano[2,3-*d*]pyrimidine



5*H*-
- 2,4-Dioxo-1,2,3,4,6,7-hexahydro-5*H*-
- Ring Synthesis 190
● Thiopyrano[2,3-*d*][1,3]thiazole

4*H*-
- 2-Oxo-1,2-dihydro-4*H*-
- Ring Synthesis 432
● Thioureas
- *N*-(2-Alkenoyl)-thioureas
- Synthesis and Cyclization Reactions 933
- *N*-(2-Alkoxycarbonylbenzoyl)-thioureas
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- *N*-(2-Cyanoethyl)-thioureas
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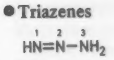
- Ring Synthesis 100
● Triazenes



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- Synthesis 884
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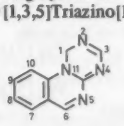
- Tetrahydro-1,3,5-triazines
- Ring Synthesis 129
- 6-Alkylthio-2,4-dioxo-1,2,3,4-tetrahydro-1,3,5-triazines
- Ring Synthesis 429
● [1,3,5]Triazino[1,2-*a*]quinazoline



1*H*-
- 1,3-Dioxo-2,3-dihydro-1*H*-
- Ring Synthesis 892
● 1,2,3-Triazole

- 1,2,3-Triazoles
- Ring Synthesis 180, 728
- 4,5-Dihydro-1,2,3-triazoles
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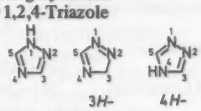
● 1,2,4-Triazole



3*H*- 4*H*-
- 1,2,4-Triazoles
- Ring Synthesis 423
- 1-(1,2-Diphenyl)-1,2,4-triazoles
- Synthesis 302
- 1,2,4-Triazole-3-carboxylic Esters
- Ring Synthesis 304
- 3-Thioxo-2,3-dihydro-1,2,4-triazoles
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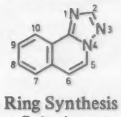
● [1,2,4]Triazolo[5,1-*a*]isoquinoline



- Ring Synthesis and Reactions of Substituents 423
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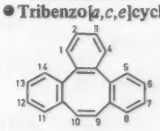

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● ***C*-Cyanomethylation**
- Replacement of Halogen 500

● **[2+1]-Cycloaddition**
- to give:

- N−C + N
- Isocyanides + Nitrosoalkanes 1089

● **[2+1+1]-Cycloaddition**
- to give:

- N−C + C + C
- Imines + Isocyanides 1087
- to give:

- O−C + C + C
- Aldehydes or Ketones + Isocyanides 1086
- to give:

- S−C + C + C
- Isothiocyanates + Isocyanides 1089

● to give:

- C−C + C + C
- Allenes + Isocyanides 1085
- Alkynes + Isocyanides 1084
- Ketene Imines + Isocyanides 1085

● **[2+2]-Cycloaddition**
- to give:

- N−C + C−C
- Formimidic Esters + Ketenes 1070

to give:

- O−C + C−C
- Aldehydes or Ketones + Ketene Acetals or Tetraalkoxyethylenes 1017
- Carbonyl Compounds + Quadricyclane 1018
- to give:

- C−C + C−C
- 1-Alkenyl Aryl Sulfides + Dichloroketene 444 (7071)
- Alkoxyacetylenes + Ketene 1118
- Vinylketenes + Alkenes 118 (7016)

● **[3+1]-Cycloaddition**
- to give:

- O−N−C + C
- Nitrones + Isocyanides 1092
- to give:

- C−N−C + C
- Azomethine Ylides + Isocyanides 1090
- Nitrile Ylides + Isocyanides 1090

● **[2+2+1]-Cycloaddition**
- to give:

- C−C + C−C + C
- Alkynes + Isocyanides 1084

● **[3+2]-Cycloaddition**
- to give:

- N−N−C + S−C
- Nitrilimines + Isothiocyanates 277
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- Review 1031
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- O−N−C + C−C
- Benzonitrile Oxides + 2-Alkynoic Esters 970
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- to give:

- O−C−C + N−C
- Oxiranes + Carbodiimides or Isocyanates 1144
- to give:

- O−C−C + O−C
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● **[4+1]-Cycloaddition**
- to give:

- O−C−C−C + C
- Allene-1,1-dicarboxylic Esters + Isocyanides 1085

● **[3+3]-Cycloaddition**
- to give:

- N−C−N + C−C−C
- Amidines + 2-Alkenals or 1-Alkenyl Ketones 528

● **[4+2]-Cycloaddition**
- to give:

- C−C−C−C + O−C
- 1-Alkoxybutadienes + Ketones 928
- to give:

- C−C−C−C + C−C
- Silylbutadienes + Maleic Anhydride 899
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- 2-Trimethylsilyl-1,3-butadiene + Dienophiles 725

● **Cycloaddition (intramolecular)**
- to give:

- *N*-Aryl-1-alkynesulfenamides, Thermal Rearrangement 956

- 2-Methylphenyl Isocyanides, via Lithiation and Reaction with Water or Electrophiles 715 (7129), 716 (7130)
- to give:

- 3-Thioureidopropanenitriles + Aqueous Acid 686
- to give:

- *N*-(2-Alkenyl)-thioureas + BF_3 etherate 933
- to give:

- 1-Alkenyl 2-Hydroxyphenyl Ketones + Acid 545

● **Cyclocondensation (intermolecular)**

- to give:

- O−C + C
- Ketones + 2-Bromo-4-butanolide 35
- to give:

- C−C + P
- *vic*-Diol Ditosylates + Arylphosphines 290
- to give:

- C−C + C
- 2-Chloroethyldimethylsulfonium Chloride + Cycloalkanones 1165 (7210)
- 2-Haloacrylonitriles + Enamines 1116
- to give:

- N−C + C−C
- Trifluoroacetaldehyde *O,N*-Acetals + Lithium Ester Enolates 610
- to give:

- S−C−C + C
- Thiiranes + 3-Chloroallyllithium 1069
- to give:

- N−N−C + N−C
- Diazomethyl Compounds + Formamidines 178
- to give:

- C−N−C + N−N
- Acyl Isothiocyanates + Hydrazines 277
- N−N−C−N + C
- α-Phenylhydrazono-α-triphenylphosphoranylidenaminoacetic Esters + Aldehydes 304
- to give:

- N−N−C + C−C
- Benzaldehyde Arylhydrazones + 3-Oxoalkanoic Esters 333
- C−C−C + N−N
- 2-Amino-4,4-dialkoxyalkanenitriles + Hydrazine 690
- 2-Amino-3-hydroxy-2-alkenenitriles + Hydrazines 794
- Malonic Acid Derivatives + Hydrazines 1034
- to give:

- N−C−N + C−C
- Amidines + 2-Bromo-2-alkenoic Esters or 1-Bromo-1-alkenyl Ketones 537
- N−C−C + N−C
- 2-Oximino-1,3-dicarbonyl Compounds + 2-Alkenamines 300
- N−C−C−N + C
- *vic*-Diamino-*N*-heteroarenes + Alkyl Dithiocarbamates or Dialkyl Carbimidodithioates 868
- to give:

- C−C−C + O−N
- Acetylenedicarboxylic Esters + Hydroxyurea 1100
- to give:

- N−C−N + O−C
- Arylthio-(silyl)-methyl Isothiocyanates + Aldehydes 567 (7110)
- O−C−C + N−C
- Enolizable Ketones + Acetonitrile 352 (7058)
- O−C−C−N + C
- 2-Aminoalkanols + Carboxylic Acids or Ketones 656
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- O−C−C + O−C
- 2-Haloalkanols + CO_2 (+ Ammonium Salts) 33
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- S−C−N + C−C
- Alkyl Dithiocarbamates + Chloroacetaldehyde 948
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- C−N−C−C + S
- *N*-(Polychloroalkyl)- or *N*-(Trichloroethenyl)-carbimidic Dichlorides + Sulfur 586
- to give:

- N−C−C + C−C
- 1-Aminoalkyl Ketones + Cyanoacetic Esters 291
- Aminocarbonylazoalkenes + 1,3-Dicarbonyl Compounds 157
- C−N−C + C−C
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- O−C−C−C + C
- 2-Hydroxybenzaldehydes + Bromonitromethane 1074
- to give:

- C−S−C−C + C
- 1-Alkylthioalkaniminium Salts + Carboxylic Acid Derivatives 412
- to give:

- C−C−C + C−C
- Alkyl 2-(Cyanomethyl)-allyl Carbonates + 1-Alkenyl Ketones or 2-Alkenoic Esters 1164 (7207)
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- to give:

- 6 Si
- Dichlorodimethylsilane (+ Li) 684
- to give:

- N−C−N + C−N−C
- 2-Aminopyridines or 2-Aminopyrimidine Derivatives + Chlorocarbonyl Isocyanate 893
- *N,N'*-Disubstituted Ureas + Alkoxycarbonyl Isothiocyanates 429
- to give:

- N−C−C−C−N + P
- 3-Amino-2-alkenamines + $R-PCl_2$, PCl_3, or $S=PCl_3$ 309
- to give:

- C−C−C−C + N−N
- 3-Amino-2-cyano-2-pentenedioic 1-Amide + Benzenediazonium Chloride 1135
- Arene-*o*-dicarboxylic Esters + Hydrazine 198
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- N−C + N−C + C−C
- 1,3,5-Triazine + Monothiomalonic Amides 863

- N–C–N + C–C–C
- Thiourea + 2-Alkenenitriles or 2-Cyano-2-alkenamides 90
- N–C–C–C + N + C
- 3-Oxoalkanamides + NH_3 + Aldehydes 1148
- to give:

- N–C–C–N + C–C
- Benzofuroxan + 1,3-Dicarbonyl Compounds 938
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- N–C–C–C + O–C
- 2-Aminopyrrole-3-carboxylic Esters + $COCl_2$ 796
- O–C–C–C + N–C
- 2-Hydroxybenzoic Esters + Isocyanates 276
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- O–C–C–C + O–C
- 5-Formyl-2,2-dimethyl-4,6-dioxo-1,3-dioxan + Aldehydes or Ketones 224
- O–C–C–C–O + C
- 1,3-Alkanediols + Dimethoxymethane 75
- Cyclopropene-3,3-dicarboxylic Acids + Enol Acylates 871
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- S–C–C + N–C–C
- 2-Alkylthio-1,3-dicarbonyl Compounds + 2-Bromoalkanamines 688
- to give:

- N–C–C + C–C–C
- 3-Amino-2-alkenoic Esters + 2-Alkenoic Chlorides or Esters 735
- 3-Amino-2-cyano-2-pentenedioic 1-Amide + 1,3-Pentanedione or Benzylidenemalononitrile or 2-Cyano-2-alkenoic Esters 1135
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- 2-Alkenamides + Enolizable Ketones 305
- C–C–C–C–C + N
- 1,5-Dicarbonyl Compounds + Hydrazines 106
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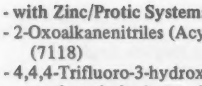

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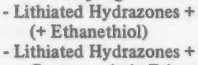

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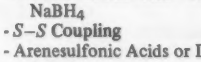

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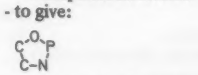

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● 2-Pentafluorophenyl-4,5-dimethyl-2-oxo-P^V-1,3,2-dioxaphosphole (CEP-OC_6F_5)
- Preparation and Use 457

● 3-Phenyl-2-phenylsulfonyloxaziridine
- Use as Hydroxylating Agent 903 (7150)
● *N*-Phenylselenophthalimide
- Use as Phenylselenylating Agent 878
● 2-Phenylselenopropanoic Acid
- Use as C_3 Synthon 27
● *N*-Phenyltriflimide
- Use 335
● Phosphorus(V) Oxide
- Use in Organic Synthesis 101, 104, 547
● 9-(3-Pinanyl)-9-borabicyclo[3.3.1]-nonane (Alpine-Borane®)
- Use as Chiral Reducing Agent 561 (7092), 712 (7120)
● Polymer-Bonded Reagents
- Cryptands 1070
● Potassium 2,6-Di-*t*-butylphenoxide
- Use as Base 962
● Pyridinium Dichromate
- Use as Oxidizing Agent 986

● Rhenium Heptasulfide
- Use 716 (7131)
● Rhodium(II) Acetate
- Use as Catalyst 347 (7037)
● Rhodium(II) Pivalate
- Use as Catalyst 347 (7037)

● L-Selectride®
- Use 335
● Sodium Bis[trimethylsilyl]-amide
- Use as Aminating Agent 442 (7064)
● Supported Reagents
- Ammonium Dichromate on Silica 641
- *t*-Butyl Hypochlorite on Faujasite X 1157
- *t*-Butyl Hypochlorite + Silica 1155
- Cerium(IV) Ammonium Nitrate on Silica 70, 641
- Copper(II) Nitrate on Clay 909 (review)
- Iron(III) Nitrate on Clay 439, 909 (review)
- Silver Nitrate on Silica 705
- *p*-Toluenesulfonic Acid on Silica 1159

● Tetrabutylammonium Hydrogen Sulfate
- Preparation 508
● Tetraheptylammonium Hydrogen Sulfate
- Preparation 508
● Tetrahexylammonium Hydrogen Sulfate
- Preparation 508
- Tetrakis[triphenylphosphine]-palladium(0)
- Use as Catalyst 645, 997 (7182), 1163 (7204)
● Tetramethylcarbamimidium Dichloride
- Use as Condensing Agent 445 (7073)
● Tetraoctylammonium Hydrogen Sulfate
- Preparation 508
● Tetrapentylammonium Hydrogen Sulfate
- Preparation 508
● Tetraphenylcyclopentadienone *O*-Tosyl-oxime
- Use 904 (7153)
● 1,1,1-Triacetoxy-3-oxo-λ^5-1,2-benz-iodoxole
Preparation and Use as Oxidizing Agent 227 (7025)
● 1,2,5-Triazine
- Use as N–C Synthon 863
● Tributyliodostannane
- Use as Catalyst 1144
● Tributylmethoxystannane
- Use as Stannylating Agent 560 (7088)
● (Tributylstannyl)-diethylaluminum
- Use as Stannylating Agent 997 (7182)
● Trichloroacetyl Chloride/Triethylamine
- Use as Dehydrating Agent 184
● Triethyl Orthotrimethylsilylpropanoate
- Use as Propynoate Anion Equivalent 448 (7081)
● Triethyloxonium Tetrafluoroborate
- Use as Condensing Agent 434
● Triethylsilane
- Use as Silylating Agent 352 (7057), 941
● 2-(Trifluoromethyl)-allyl-trimethylsilane
- Preparation and Use 709 (7113)
● 2,4,6-Triisopropylphenylsulfonyl-chloride
- Use 480, 481
● 1-(2,4,6-Triisopropylphenylsulfonyl)-3-nitro-1,2,4-triazole
- Use 476, 477
● Trimethylsilyl Triflate
- Preparation 206
- Use as Catalyst 711 (7119)
- Use as Silylating Agent 206, 403
- Use in Nucleoside Synthesis 410
● 2-Trimethylsilylethanol
- Use 835, 838
● 2-Trimethylsilylethyl Carbonochloridate
- Use for NH_2 Protection 838
- Use for OH Protection 830
● 2-Trimethylsilylethyl 4-Nitrophenyl Carbonate
- Use for NH_2 Protection 838
● *N*-(Trimethylsilylmethyl)-pyridinium Triflate
- Use as Methylene Source 559 (7085)
● Trimethylsilylmethyl Triflate
- Preparation 732
● Trimethylsilyl-2-propenol
- Use for *P*-OH Protection 840
● 3-Trimethylsilyl-2-oxotetrahydro-1,3-oxazole
- Use for OH Group Protection 841
● Trimethyl *N*-Trimethylsilylacetimidate
- Use as Silylating Agent 818
● Trimethylsilyl *N*-Trimethylsilyl-carbamate
- Use as Silylating Agent 819
● Trimethylsilyl *N*-Trimethylsilyl-sulfamate
- Use as Silylating Agent 819
● 1,1,1-Trimethyl-2,2,2-triphenyl-disilane
- Use 684
● Tris[distyryl ketone]-dipalladium
- Use as Catalyst 1164 (7207)
● Tris[1,2,4-triazol-1-yl]-phosphine Oxide
- Use 463
● Triton X-100
- Use 1125
● Trityl Perchlorate
- Use in Silylation Reaction 941

● Urotropin (Hexamethylenetetramine)
- Use 1111

● Valine *t*-Butyl Ester
- Use as Chiral Reagent 812 (7135) (*S*)
● Valine Methyl Ester
- Use as Chiral Reagent 1052 (L)
● L-Valinol
- Use as Chiral Reagent 443

● Zirconium(IV) Oxide Acetate
- Use as Catalyst 1080 (7194)

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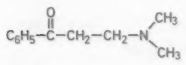
Errata and Addenda 1985

K. Matsumoto, A. Sera, T. Uchida, *Synthesis* **1985** (1), 1–26:
The structure of the second product in Table 16 (p. 18) should be:

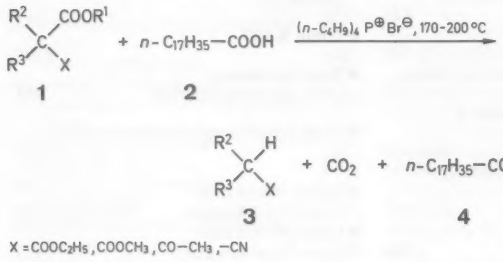


Y. Vo Quang, D. Carniato, L. Vo Quang, F. Le Goffic, *Synthesis* **1985** (1), 62–64:
The substituents R^1 for the compounds **2–4b** and **c** (p. 63) should be $C_6H_5—CH_2—O—CO—$ and $C_2H_5—O—CO—$, respectively.

K. N. Mehrotra, I. S. Singh, J. Roy, *Synthesis* **1985** (1), 81–83:
In the Table (p. 82), the I. R. assignment (C=O) should read (C=C) for all products.

J. M. Aizpurua, C. Palomo, *Synthesis* **1985** (2), 206–207:
The following paragraph should be added:
The procedure described is a specific adaption of Roesky's method [H. W. Roesky, H. H. Gieve, *Z. Naturforsch. [b]* **25**, 773 (1970)].
The authors regret the omission of this acknowledgement in the above communication.

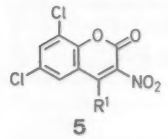
E. V. Dehmlow, E. Kunesch, *Synthesis* **1985** (3), 320–321:
The first formula scheme (p. 320) should be:



X = $COOC_2H_5$, $COOCH_3$, $CO—CH_3$, —CN

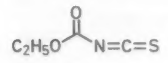
R. J. K. Taylor, *Synthesis* **1985** (4), 364–392:
The heading for the experimental procedure on p. 379 should be:
2-Benzyl-3-*n*-butylcyclopentanone (23)[90]:

A. Caşcaval, *Synthesis* **1985** (4), 428–429:
The structure of product **5** (p. 428) should be:



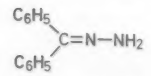
5

Y. Sanemitsu, *Synthesis* **1985** (4), 429–430:
The structure of compound **2** (p. 429) should be:



2

L. Lapatsanis, G. Milias, S. Paraskewas, *Synthesis* **1985** (5), 513–515:
The structure of compound **2** should be:

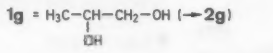


2

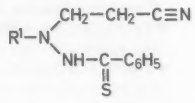
T. Eicher, R. Rohde, *Synthesis* **1985** (6/7), 619–625:
The heading for the last experimental procedure on p. 621 should be:
***endo*/*exo*-6a-Dimethylamino-6-oxo-4,5-diphenyl-2a,6,6a,7-tetrahydro-7*H*-cyclobuta[b]pyrrolizin (*endo*/*exo*-3d):**
The heading for the 3rd experimental procedure on p. 624 (left-hand column) should be:

11a-Dimethylamino-1,2-diphenyl-3-oxo-5,6,11,11a-tetrahydro-3*H*-pyrrolo[2,1–b][3]benzazepin (17):

Xue-Ping Gu, I. Ikeda, M. Okahara, *Synthesis* 1985 (6/7), 649–651:
The structure of product **1g** (p. 650) should be:



I. Yamamoto, K. Fukui, S. Yamamoto, K. Ohta, K. Matsuzaki, *Synthesis* **1985** (6/7), 686–688:
The structure of compounds **3e, f** should be:

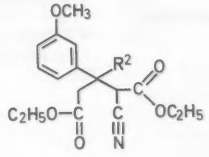


3e,f

I. Monkovic, H. Wong, C. Bachand, *Synthesis* **1985** (8), 770–773:
Reference 9 (p. 772) should be:
[9]Scherer, C. A., Dorschel, C. A., Cook, J. M., Le Quesne, P. W. *J. Org. Chem.* **1972**, *37*, 1083.

A. Cornelis, P. Laszlo, *Synthesis* **1985** (10), 909–918:
Footnotes a and b of Table 10 (p. 916) should be:
[a] 5-Methyl-2-nitro product.
[b] 3-Hydroxy-4-nitro product.

Abstract 7192, *Synthesis* **1985** (11), 1079:
The structure of product **3** should be:



3

D. Moderhack, *Synthesis* **1985** (12), 1083–1096:
The abbreviated name of compound **23** (p. 1087) should read 3-amino-4-imino-2-azetine.

S. M. Fahmy, R. M. Mohareb, *Synthesis* **1985** (12), 1135–1137:
The heading for the last experimental procedure on p. 1136 should be:
3-Amino-N^5-(2-aminophenyl)-2-cyano-2-pentenediamide (15):

F. Fülöp, G. Bernáth, *Synthesis* **1985** (12), 1148–1149:
The heading for the first experimental procedure on p. 1148 should be:
2-Substituted-1,2,3,4,5,6,7,8-octahydroquinazolines (3); General Procedure: